EXECUTIVE SUMMARY

AIRCRAFT ACCIDENT INVESTIGATION BOARD MQ-1L "PREDATOR," S/N 03-0108 EDWARDS AIR FORCE BASE CALIFORNIA 13 OCTOBER 2004

On 13 October 2004, at approximately 1342 hours (1:42 p.m.) local time, an MQ-1L, Predator, S/N 03-0108, experienced significant landing gear and rear propeller damage while attempting to land. The Predator was conducting a production test/time accumulation flight at the Gray Butte Flight Operations Facility, Palmdale, California.

Mission planning and required briefings with all crew members (Aeronautical System Inc., (ASI) personnel) were conducted on 13 October 2004. Although the instructor pilot for the flight did not sign the required pre-flight mission briefing sheet, all other aircraft pre-flight preparations were normal. The mission was planned to conduct a second test card test flight of the Predator as well as accumulate flight time on the Predator. Student pilot upgrade training was accomplished at the same time as the time accumulation phase portion of the flight.

After completion of the second test card test flight procedures, the mishap student pilot flying the Predator turned the Predator onto a normal base leg and then turned onto final approach to the runway. Upon initial contact with the runway, the Predator hit nose landing gear first, causing the Predator to bounce back into the air. The Predator then experienced pilot induced oscillations, causing the nose gear and main gear to hit the runway four to six more times before the nose gear and main gear collapsed and the Predator came to rest.

There were no injuries or fatalities. The Predator suffered significant damage, primarily to the nose and main landing gears and rear propeller area. The loss was valued at \$1,721,973. There was no apparent media interest regarding this accident.

The Accident Investigation Board (AIB) President found by clear and convincing evidence that the causes of the mishap were the student pilot's control inputs that caused a series of pilot induced oscillations and the instructor pilot's failure to take appropriate corrective action. The AIB President also determined that a substantial contributing factor, supported by substantial evidence, was ASI's failure to train and prepare their student pilots about pilot induced oscillations when operating Predators.

Under 10 U.S.C. 2254(d), any opinion of the accident investigators as to the cause of, or the factors contributing to, the accident set forth in the accident investigation report may not be considered as evidence in any civil or criminal proceeding arising from an aircraft accident, nor may such information be considered an admission of liability by the United States or by any person referred to in those conclusions or statements.